

AMENDMENTS TO THE CLAIMS:

Amend the claims as follows:

Claims 1-14. (Canceled)

1. ~~15.~~ (Currently Amended) An isolated and purified human immunodeficiency virus type 1 (HIV-1) mutant GP120gp120 envelope glycoprotein comprising an amino acid mutation in position 112, according to the amino acid numbering of Kwong et al., Nature, Vol. 393, 18 June 1998, said mutation in position 112 consisting of replacement of W with S, I, or F, wherein said numbering scheme is based upon the molecular clone HxBc2 or I or F.

2. ~~16.~~ (Previously Presented) The mutant of claim ~~15~~ further comprising at least one mutation of S at position 338 or position 427 for W or F at position 96 for W.

3. ~~17.~~ (Currently Amended) An isolated and purified human immunodeficiency virus type 1 (HIV-1) mutant GP120gp120 envelope glycoprotein comprising an amino acid mutation in position 427 consisting of replacement of W with S wherein said numbering scheme is based upon the molecular clone HxBc2, or in position 338 consisting of replacement of W with S wherein said numbering scheme is based upon the molecular clone HxBc2, according to the amino acid numbering of Kwong et al., Nature, Vol. 393, 18 June 1998, said mutation consisting of replacement of W with S.

Claims 18-20. (Canceled)